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Reply Brief

PATENT
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicants: Daniel Richard Schneidewend et al. Examiner: J. P. Salce

Serial No: 09/190,309

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For: A SYSTEM FOR PROCESSING PROGRAMS AND SYSTEM TIMING
INFORMATION DERIVED FROM MULTIPLE BROADCAST SOURCES

Mail Stop Appeal Brief-Patents
Hon. Commissioner for Patents
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REPLY BRIEF

Applicant provides this Reply Brief in response to the Examiner's Answer mailed August 9, 2007.

CERTIFICATE OF MAILING 37 C.F.R. §1.8(a)

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1. Status of Claims

Claims 1-19 are pending, stand rejected and are under appeal.

2. Grounds of Rejection to be Reviewed on Appeal

Claims 1, 2, 4-6, 10, 11 and 13-17 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,479,268 to Young et al. (hereinafter 'Young') and this rejection is presented for review in this Appeal.

Claims 3 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Young in view of U.S. Patent No. 5,619,274 to Roop et al. (hereinafter 'Roop'). Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Young in view of Program and System Information Protocol for Terrestrial Broadcast and Cable document (hereinafter 'ATSC') in further view of U.S. Patent No. 5,561,461 to Landis et al. (hereinafter 'Landis'). Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Young in view of ATSC. Claims 8, 9 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Young in view of U.S. Patent No. 5,808,694 to Usui et al. (hereinafter "Usui"). These rejections are presented for review in this Appeal, although separate arguments will not be presented, as indicated in the following grouping of the claims.

Regarding the grouping of the claims, (1) claims 2-14 stand or fall with claim 1, and (2) claims 17-19 stand or fall with claim 16. Further, although claim 15 may be allowed concurrently with claim 1, claim 15 may only fall by itself.

3. Argument

A. Introduction

The Examiner's Answer makes it abundantly clear that a large part of the disagreement between Applicant and Examiner is based on the construction of various claim terms. As explained more fully below, the Examiner is adopting constructions that are completely at odds with common understanding of one of ordinary skill in the art and with the usage of those terms in our specification. Accordingly, such constructions are well beyond the broadest reasonable construction that the PTO is permitted to use. In particular, the terms at issue include at least "current time reference", "clock", and "synchronizing" a clock.

As a brief example, elaborated on more fully later, the Examiner's position is that a "clock" (recited in the claims) can be construed to include a listing showing a single scheduled start time for a program (see Examiner's Answer, page 15, lines 5-7, equating "clock" with "the schedule update information"). However, Applicant notes that even the broadest reasonable construction of "clock" requires that the "clock" actually keep time and not merely display one single time. Applicant's position is supported by the specification, as well as by dictionary definitions. As an example, Applicant provides the following broad definition from a general dictionary that uses the words "periodic system" and "measured" to indicate the notion of keeping time and not merely displaying a single time.

"clock ... 1 : ... *broadly* : any periodic system by which time is measured"

(underlining added by Applicant, taken from <http://www.merriamwebster.com/cgi-bin/dictionary> on September 28, 2007). Under the Examiner's construction of "clock", merely writing "12:01

pm" on this page transforms this page into a "clock", which is clearly not a reasonable construction.

We now provide a short summary of an implementation of our specification, as well as certain features of our claims.

A common problem associated with recording broadcast programs by employing a timer of a recording device is that the beginning of the recording may not precisely coincide with the actual start of a program broadcast. One reason for the disparity is that a clock utilized by a program source may not indicate the same time measured by a clock used by a recording device. To ensure that recording start times coincide with actual start times of program broadcasts, an aspect of the present principles includes receiving current time references from multiple program sources and synchronizing a scheduling clock used by a recording device with clocks from different broadcast sources (see Specification, p. 7, line 41 to p. 8, line 40). At least some of these features are recited in claims 1 and 16 and are discussed at length below. Additionally, another aspect of the present principles includes maintaining multiple scheduling clocks simultaneously, as stated in claim 15, which is also discussed below.

Claims 1 and 16 are each patentably distinct and not anticipated by the cited reference at least because the cited prior art reference does not teach or suggest: receiving current time references from different corresponding program sources; and synchronizing a scheduling clock with clocks from different program sources. Moreover, claim 15 is patentable over the cited prior art reference at least because the reference fails to disclose or suggest maintaining multiple scheduling clocks simultaneously. Thus, claims 1, 15 and 16, are separately patentable and are each presented for review in this appeal. In addition, claims 2-14 and 17-19, due at least to their

dependencies on claims 1 and 16, respectively, are patentable and presented for review in this appeal.

- B. **Claim 1 is not anticipated under 35 U.S.C. §102(b) by Young at least because Young does not teach: 1) receiving two sets of current time reference information respectively corresponding to two different program sources; and 2) synchronizing a scheduling clock with clocks from two different program sources.**

Claim 1 is patentable over Young because Young does not anticipate the features of: receiving current time reference information corresponding to two different program sources; and synchronizing a scheduling clock with clocks from different program sources. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 1 recites, inter alia: “a tuner operable by the processor to receive (1) for the first program, first current time reference information from a first corresponding program source, wherein the first current time reference information provides information for synchronizing a scheduling clock with a clock of the first corresponding program source, and (2) for the second program, second current time reference information from a second corresponding program source, wherein the second current time reference information provides information for synchronizing a scheduling clock with a clock of the second corresponding program source” (emphasis added).

In addition, claim 1 also recites, inter alia: a “processor programmed to derive a first

scheduling clock based on the first current time reference information, the first scheduling clock synchronized with the clock of the first corresponding program source” and “the processor programmed to derive a second scheduling clock based on the second current time reference information, the second scheduling clock synchronized with the clock of the second corresponding program source” (emphasis added).

Young does not disclose the claim elements of receiving current time references respectively corresponding to two different program sources and synchronizing a scheduling clock with clocks from two different program sources. Young is directed to a program guide display through which a user may schedule the recording of a program (see, e.g., Young, column 7, lines 24-30). The Young system includes a tuner that receives a set of update information. The update information comprises listing information, cable channel assignment data, clock update data used to automatically set a system clock in a controller coupled to the tuner, “schedule update times, which may vary from once a day to a continuously transmitted format,” and last minute schedule change data (see Young, column 12, lines 58-61; column 13, lines 3-8). The set of update information may be transmitted by “one or more local stations or cable channels several times a day or continuously. When update is required, [the] programmable tuner 202 will be tuned automatically to the station or cable channel carrying the data.” (see Young, column 12, lines 58-64).

The Examiner asserts that Young’s description of transmission of updated schedule information, including “last minute schedule change data” and “schedule update time,” and clock update data to the tuner constitute receiving “current time reference information” from multiple program sources (see Examiner’s Answer, p. 14, paragraph 4 to p. 16, paragraph 3). In addition,

the Examiner states that the clock update data used to set the system clock provides information for synchronizing a scheduling clock with clocks from multiple program sources (see Examiner's Answer, p. 16, paragraphs 2-3 (citing Young, column 12, lines 58-67)). Further, the Examiner cites a comparison feature disclosed in Young to support the assertion that Young teaches synchronization of a scheduling clock with clocks from multiple program sources (see Examiner's Answer, p. 15, paragraph 2) (see also p. 15, paragraph 4 to p. 16, paragraph 1). Specifically, the Examiner cites Young's description of initiating a recording of a selected program when the system clock matches the program start time obtained from schedule update information (see Examiner's Answer, p. 15, paragraph 2) (see Young, column 13, lines 14-24).

First, Young does not disclose or suggest receiving multiple sets of "current time reference information" respectively corresponding to multiple program sources, as "last minute schedule change data" and "schedule update time" are not current time reference information. Second, transmission of clock update data to the tuner does not anticipate the feature of receiving multiple sets of current time reference information respectively corresponding to multiple program sources because the clock update data corresponds to a single source. Third, the claim feature of synchronizing a scheduling clock with clocks from different program sources is not anticipated by Young, as the system clock described in Young is synchronized with only one clock corresponding to one source. Fourth, Young's description of comparing a system clock time to a program start time obtained from schedule update information does not anticipate the claim feature of synchronizing a scheduling clock with clocks from different program sources because the system clock of Young is not adjusted in any way in response to the comparison. Thus, claim 1 is patentable over Young at least because Young does not disclose or suggest

receiving current time references respectively corresponding to two different program sources; and synchronizing a scheduling clock with clocks from different program sources.

B1. The claim feature of receiving multiple sets of current time reference information respectively corresponding to multiple program sources is not anticipated by Young, as “Last minute schedule change data” and “schedule update time” are not “current time reference information.”

Neither “last minute schedule change data” nor “schedule update time” anticipates “current time reference information.” Last minute schedule change data consists of information about an updated listing of future times in which programs will be broadcast. A listing of future broadcast times does not provide a current time reference, such as for example, the current time measured by a program source. Furthermore, Young states that “schedule update times . . . may vary from once a day to a continuously transmitted format” (see Young, column 13, lines 6-7). Clearly, a schedule update time is simply a time in which a tuner is scheduled to receive update information. The scheduled times at which the tuner receives updates is not a current time reference. Accordingly, neither “last minute schedule change data” nor “schedule update time” may be interpreted as a “current time reference.”

B2. Because clock update data corresponds to a single source, Young does not anticipate the feature of receiving multiple sets of current time reference information respectively corresponding to multiple program sources.

In support of the assertion that the clock update data used to set the system clock is received from multiple program sources, the Examiner cites the section of Young disclosing that the set of update information may be transmitted through multiple channels (Examiner’s Answer,

p. 16, paragraphs 2-3 (citing Young, column 12, lines 58-67)). However, the clock update data does not correspond to multiple program sources. As stated above, the clock update data may alternatively be transmitted through one channel, indicating that there is only one universal set of clock update data. Young does not disclose or suggest that each channel has its own corresponding clock. Thus, even though universal clock update data may be transmitted to the tuner through multiple channels, the clock update data provides information for synchronizing the system clock with only one clock corresponding to one source. Moreover, Young does not disclose that the source corresponding to the one clock is a program source. Accordingly, claim 1 is not anticipated by Young, as Young fails to disclose the feature of receiving multiple sets of current time reference information respectively corresponding to multiple program sources.

B3. The claim feature of synchronizing a scheduling clock with clocks from different program sources is not anticipated by Young, as the system clock described in Young is synchronized with only one clock corresponding to one source.

Young's description of updating a system clock does not anticipate the claim feature of synchronizing a scheduling clock with clocks from different program sources. The Examiner asserts that the clock update data provides information for synchronizing a scheduling clock with clocks from multiple program sources (Examiner's Answer, p. 16, paragraphs 2-3 (citing Young, column 12, lines 58-67)). However, as discussed above, the system clock is updated with respect to one clock corresponding to one source. Although the clock update data may be transmitted through several channels, as discussed above, Young nowhere discloses that each channel has its own corresponding clock. Thus, claim 1 is not anticipated by Young, as Young fails to disclose synchronizing a scheduling clock with clocks from multiple program sources.

B4. Comparing a system clock time to a program start time obtained from schedule update information does not anticipate the claim feature of synchronizing a scheduling clock with clocks from different program sources

The claim feature of synchronizing a scheduling clock with clocks from different program sources is not disclosed or suggested by Young. As stated above, in support of the assertion that Young discloses synchronization between a scheduling clock and clocks from different program sources, the Examiner cites Young's description of initiating a recording of a selected program when the system clock matches the program start time obtained from schedule update information (see Examiner's Answer, p. 15, paragraph 2) (see Young, column 13, lines 14-24).

However, merely comparing the system clock time with the scheduled program start time does not constitute synchronization of clocks. The system clock is not adjusted in any way so that it is synchronized with another clock. Moreover, the system clock cannot be synchronized using a schedule listing alone because a schedule listing provides no indication of a current time measured by a clock from a program source. Thus, Young's disclosure of comparing a system clock time to a scheduled program start time to determine when to initialize a recording does not anticipate the claim feature of synchronizing a scheduling clock with clocks from multiple program sources.

Accordingly, claim 1 is patentably distinct from Young at least because Young does not disclose or suggest: receiving current time references corresponding to two different program sources; or synchronizing a scheduling clock with clocks from multiple program sources. Furthermore, claims 2-15 are patentable over Young due at least to their dependencies on claim 1. Withdrawal of the rejections of claims 1-15 is respectfully requested.

C. Claim 15 is not anticipated under 35 U.S.C. §102(b) by Young because Young fails to disclose maintaining a plurality of scheduling clocks for at least a period of time.

As stated above, claim 15 is patentable due at least to its dependency on claim 1.

However, claim 15 is also patentable because Young fails to disclose maintaining a plurality of scheduling clocks for at least a period of time. As stated above, a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Claim 15, which is dependent on claim 1, includes, inter alia: “the processor is programmed to maintain, for at least a period of time, both the first scheduling clock and the second scheduling clock.”

Young fails to disclose or suggest the claim element of maintaining multiple scheduling clocks for at least a period of time. A “scheduling clock” is “used to time the initiation of scheduled program processing functions,” such as, for example, a recording (see Specification, p. 8, lines 7-9; p. 7, lines 33-35). The only clock maintained by the system described in Young that may arguably constitute a scheduling clock is the system clock. However, Young does not disclose that its system maintains more than one system clock. Accordingly, claim 15 is not anticipated by Young at least because Young fails to disclose or suggest maintaining multiple scheduling clocks.

The Examiner asserts that Young discloses maintaining multiple clocks and cites Figure 4 of Young, which lists durations of programs recorded on a video cassette. However, claim 15 recites maintaining multiple scheduling clocks. As stated above, a “scheduling clock” is “used to

time the initiation of scheduled program processing functions” (see Specification, p. 8, lines 7-9).

While the Young system may utilize a counter for measuring the duration of an elapsed program, the counter is not used to time the initiation of a scheduled program processing function.

Accordingly, Young does not anticipate the feature of maintaining multiple scheduling clocks for at least a period of time. Thus, claim 15 is patentable over Young. The Applicants respectfully request withdrawal of the rejection of claim 15.

D. Claim 16 is not anticipated under 35 U.S.C. §102(b) by Young at least because Young does not teach: 1) receiving two sets of current time reference information respectively corresponding to two different program sources; and 2) synchronizing a scheduling clock with clocks from two different program sources.

Claim 16 is patentable over Young at least because Young fails to teach the features of: receiving two sets of current time reference information respectively corresponding to two different program sources; and synchronizing a scheduling clock with clocks from different program sources. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 16 includes, inter alia: “receiving, by a tuner, (1) a first current time reference information from the first program source, wherein the first current time reference information provides information for synchronizing a scheduling clock with a clock of the first program source, and (2) a second current time reference information from the second program source, wherein the second current time reference information provides information for synchronizing a

scheduling clock with a clock of the second program source.”

Moreover, claim 16 recites, inter alia: “deriving a first scheduling clock based on the first current time reference information, the first scheduling clock being synchronized with the clock of the first program source” and “deriving a second scheduling clock based on the second current time reference information, the second scheduling clock being synchronized with the clock of the second program source.”

As discussed above with regard to claim 1, Young does not disclose the claim elements of: receiving current time references corresponding to two different program sources; and synchronizing a scheduling clock with clocks from different program sources. Accordingly, claim 16 is patentable over Young for at least the reasons stated above. Furthermore, claims 17-19 are patentable over Young due at least to their dependencies on claim 1. Withdrawal of the rejections of claims 16-19 is earnestly requested.

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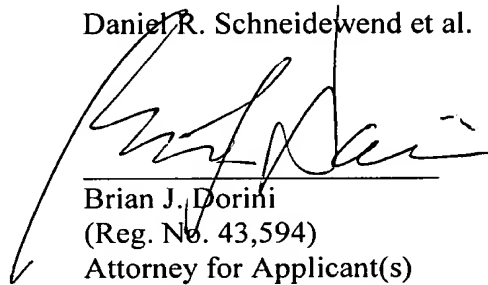
E. Conclusion

At least the above-identified recitations of the pending claims are not disclosed or suggested by the teachings of the applied art reference. Accordingly, it is respectfully requested that the Board reverse the rejection of claims 1-19.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's Deposit Account No. 07-0832.

Respectfully submitted,

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